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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,178	04/16/2004	Shiro Nishimoto	44085-171	8286

7590 07/27/2007  
McDermott, Will & Emery  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER
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DEGHAN, QUEENIE S

ART UNIT	PAPER NUMBER
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1731

MAIL DATE	DELIVERY MODE
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07/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication..

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/825,178		NISHIMOTO ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Queenie Dehghan		1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 21, 2007 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 recites the limitation "the two dimensional image" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al. (6,449,975) in view of Nakamura et al. (2002/0054976) and Meguro (machine translation of JP 2000-090619 as provided by IPDL). Murakami discloses a manufacturing process for a glass substrate comprising of melting a glass material, flowing the melted glass into a lower mold and press molding the glass between an upper mold and the lower mold into a glass substrate (col. 14 lines 43-62, figures 8 and 10). However, Murakami does not specifically recite a coring process. Nakamura et al. teach press molding a glass material and a core drilling process for forming a center hole in the glass substrate ([0009], [0010], [0061]). Since Nakamura et al. teach forming a glass substrate from an axisymmetric transformation ([0048]), it would have been obvious to one of ordinary skill in the art at the time the invention was made to expect that the hole was created where the center of gravity is set to the center of hole that is drilled out. In further support, Meguro teaches a glass substrate that has center hole created ([0010], drawing 3). Meguro also uses the center of gravity as the center

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of the hole. Specifically, Meguro discloses a large core part 3 comprising a hole part 38 that causes a shift in the center of gravity from the center of the hole and corrects for it by inserting another hole part 39 and in essence shifts the center of gravity back to the center of the hole ([0005], [0008], [0012], [0026], all drawings). Clearly Meguro uses the center of gravity as the center of the hole and it would have been obvious to one of ordinary skill in the art at the time the invention was made to expect Meguro to active detect the center of gravity of the glass substrate in order for Meguro to adjust for it. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the core drilling processing steps of Nakamura et al in order to create a doughnut shape disk for use as a magnetic disk, as taught by Nakamura et al. and to utilize the center of gravity as the center of the hole in the process of Murakami in order to provide for a magnetic disk to be used as a recording medium that has minimal error rate when used.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al. (6,449,975) in view of Nakamura et al. (2002/0054976) and Meguro (JP 2000-090619), as applied to claim 20 above in further view of Togashi (Machine translation of JP 2001-273661 as provided by IPDL). Meguro fails to disclose a means for detecting the center of gravity. Togashi teaches a recording medium and a photodiode that detect the center of gravity of the recording medium by carrying out image processing as viewed from the direction of the thickness of the recording medium (all drawings, [0001], [0005]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the detecting means for the center of

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gravity of Togashi in the process of Murakami, Nakamura and Meguro in order to provide for a well balanced recording medium and prevent reading errors.

### ***Response to Arguments***

5. New claims have been presented and arguments have not been sufficiently presented regarding the new claim. Nonetheless, the remarks are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie Dehghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Q Dehghan

  
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